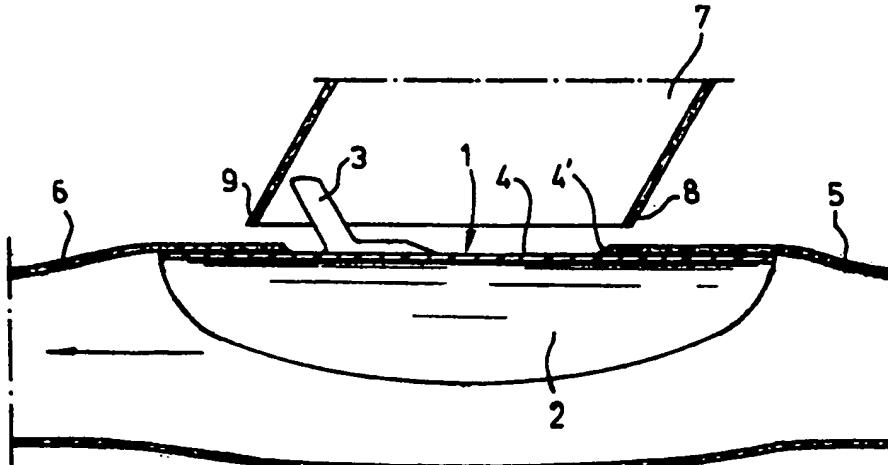




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(54) Title: TEMPORARY VASCULAR SEAL FOR ANASTOMOSIS



(57) Abstract

The invention relates to a temporary intravascular arteriotomy seal (1, 26) for insertion into and retrieval from a blood vessel through an opening in the wall of said vessel. The seal comprises a thin flexible sheet material (2, 32). According to one embodiment, in an un tensioned state, the seal is curved and foldable in the width direction. It is adapted to be folded in the width direction upon exertion for a force on the gripping element directed in the length direction, and upon contacting of the sheet material by the sides of the opening in the vessel wall. By use of the present sealing device, arterial by-pass grafting in a briefly-occlusive or non-occlusive end-to-side or side-to-side anastomosis technique is possible with virtually no obstruction to flow, little endothelial denudation and otherwise no wall damage by the intravascular device, and without blocking of side branches. A further embodiment of a device according to the present invention is characterized in that the gripping element is formed by a supply duct which ends in an opening in the flexible sheet material for administration of substances to the supply duct into a blood vessel for rescue arterial perfusion purposes. Optionally, the seal may be inflatable.

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